

In the Claims:

Please amend claims 1, 3, 7-9 and 12 as follows:

Sub 101
1. (Currently Amended) A liquid crystal device comprising:
a liquid crystal material characterized by spontaneous polarization,
being applied signal for controlling a light transmittance of said material, wherein a
voltage of said signal for writing data, corresponding to an image to be displayed and
switched by thin film transistors, to said material is offset positively or negatively from
0 V at said material except during applying said signal.

2. (Original) The liquid crystal device claim1 wherein ~~wherein~~ said
signal is offset positively or negatively so that a light transmission through said liquid
crystal material being driven by said signal becomes to be blocked.
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3. (Currently Amended) A liquid crystal device comprising:
a first substrate including a first electrode on a first face thereof;
a second substrate including a second electrode on a second face
thereof, wherein said second substrate and said first substrate are sealed spaced apart so
that said first and second face each other;
a liquid crystal material having spontaneous polarization filled in a
space between said first and second substrates;

a first voltage generating circuit for supplying a voltage to said first electrode; and

a data signal circuit for supplying a data pulse to said second electrode,

wherein a voltage across said liquid crystal between said first and second electrodes is kept positively or negatively to a reference voltage of said device except during said data pulse being applied when an image is displayed.

4. (Original) The liquid crystal device in claim 3 wherein said data pulse is offset positively or negatively so that a light transmission through said liquid crystal material being driven by said pulse becomes to be blocked.

5. (Original) The liquid crystal device claim 3 or 4 wherein said second substrate having an active element electrically connected to said second electrode so as to electrically control a picture element.

6. (Original) The liquid crystal device claim 5 wherein said voltage supplied by said first voltage generating circuit is offset so that a voltage across said liquid crystal material between said first and second electrodes is kept positively or negatively to said reference voltage of said device except during said data pulse being applied.

7. (Currently Amended) A liquid crystal panel comprising:
a first substrate including a first electrode on a first face thereof;
a second substrate including a second electrode on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second face each other;
a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates;
a first voltage generating circuit for supplying a voltage to said first electrode;
a data signal circuit for supplying a data pulse to said second electrode; and
a light source for emitting more than monochromatic lights, each of said monochromatic lights being emitted time divisionally toward said first or second substrates,
wherein a voltage across said liquid crystal material between said first and second electrodes is kept positively or negatively to a reference voltage of said device during except said data pulse being applied when an image is displayed.

8. (Currently Amended) A liquid crystal panel comprising:
a first substrate including a first electrode on a first face thereof;

a second substrate including a second electrode on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second face each other;

a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates;

a first voltage generating circuit for supplying a voltage to said first electrode;

a data signal circuit for supplying a data pulse to said second electrode; and

polarizer films provided on each outer face of said first and second substrates,

wherein a voltage across said liquid crystal material between said first and second electrodes is kept positively or negatively to a reference voltage of said panel except during said data pulse being applied so that said liquid crystal material blocks a light transmission through said liquid crystal material when an image is displayed.

9. (Currently Amended) A liquid crystal display panel comprising:

a first substrate including a common electrode on a first face thereof; a second substrate including data signal electrodes, scanning electrodes, and

switching elements which are connected to one of said data signal electrodes and one of said scanning electrodes on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second faces face each other;

a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates;

a common reference voltage generating circuit for defining a reference voltage of said data signal electrode; and

a common electrode voltage generating circuit for supplying a voltage to said common electrode, wherein said common voltage is offset to positive or negative voltages when an image is displayed.

10. (Original) The liquid crystal display panel of claim 9 wherein said liquid crystal material having spontaneous polarization is ferroelectric liquid crystal material.

11. (Original) The liquid crystal display panel of claim 9 wherein said first substrate has a color filter.

12. (Currently Amended) A liquid crystal display panel comprising:

a first substrate including a common electrode on a first face thereof;

a second substrate including data bus lines, scanning bus lines, and switching elements which are connected to one of said data bus lines and one of said scanning bus lines on a second face thereof, wherein said second substrate and said first substrate are sealed spaced apart so that said first and second faces face each other;

a liquid crystal material having spontaneous polarization filled in a space between said first and second substrates; and

a common electrode voltage generating circuit for supplying a voltage to said common electrode; and

A29 a common reference voltage generating circuit for defining a reference voltage of said data bus lines, wherein said reference voltage is offset to positive or negative voltages when an image is displayed.

13. (Original) The liquid crystal display panel of claim 12 wherein said liquid crystal material having spontaneous polarization is ferroelectric liquid crystal material.

14. (Original) The liquid crystal display panel of claim 12 wherein said first substrate has a color filter.

15. (Original) The liquid crystal display panel claim 12 further comprising:

polarizer films provided on each outer faces of said first and second substrate, wherein said common voltage is offset so as that a light transmission of said liquid crystal material becomes to be block.

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a light source emitting a plurality of monochromatic colors, wherein each monochromatic color is emitted by said light source time divisionally in synchronism with a operation of said liquid crystal display panel.
